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EXAMINER

LEE, PHILIP C

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,560

Applicant(s)

GUSTAFSSON, PATRIK

Examiner

Philip C. Lee

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/13/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-34 are presented for examination.

Claim Rejections – 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 33 must be a computer program stored in a computer-readable medium, wherein the computer-readable medium is not defined as a signal or transmittal wave, etc. in the specification. (i.e. the claimed invention cannot be a software program without being stored on a form of medium, e.g. disk).

Claim Rejections – 35 USC 112

3. Claims 1-18 and 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim language in the following claims is not clearly understood:

i. As per claim 1, lines 11-14, it is unclear how an access request signal can be forwarded by a terminal when the access request signal is already sent by the terminal in lines 7-10.

ii. As per claim 23, line 15, it is unclear if the network actually comprises an authentication block (i.e. “optionally” is indefinite).

Claim Rejections – 35 USC 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalke, U.S. Patent Application Publication 2004/0137890 (hereinafter Kalke) in view of Martin, JR. et al, U.S. Patent Application Publication 2003/0023849 (hereinafter Martin, JR.).

6. As per claims 1 and 33, Kalke taught the invention substantially as claimed by which a terminal (10) (122, fig. 1), enabled for handling data-protocol services, is dynamically configured for the data-protocol services specific to a service provider (page 4, paragraph 60) so as to be able to connect said terminal (10) to an IP backbone network via a network (16) (page 4, paragraphs 70-71), which provides said data-protocol services and which is provided by said service provider (page 7, paragraph 114), comprising the steps of:

sending (42, 42a) an access-request signal (30, 30a) (page 5, paragraph 84) to the network (16) by the terminal (10) for connecting to a help-portal server (24, 24a) of said network (16) (fig. 8, page 5, paragraphs 79 and 84) and for requesting a provisioning signal (38) or a management session signal (38a) for configuring the terminal (10) (page 4, paragraph 65); and

forwarding (52, 52a) the access-request signal (30, 30a) to the help-portal server (24, 24a) by the terminal (10) using a well-known uniform resource locator (URL) (e.g. APN) and a trusted access point node (20, 20a) (e.g. GGSN that handle the specified APN) in order to provide the provisioning signal (38) or the management session signal (38a) to the terminal (10) (page 5, paragraphs 83-90; page 6, paragraph 106; page 9, paragraph 149).

7. Kalke did not specifically teach provisioning in a secure way based on a chain of trust. Martin, JR. taught a similar invention for provisioning in a trusted (i.e. "secure") environment based on a chain of trust (page 2, paragraphs 18-20).

8. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Kalke and Martin, JR. because Martin, JR.'s teaching of provisioning in a trusted environment would increase the security in Kalke's system by providing the ability to control provisioning to mobile devices to prevent unauthorized provisioning (page 1, paragraph 3).

9. As per claim 19, Kalke taught the invention substantially as claimed comprising:

a terminal (10) (122, fig. 1), enabled for handling data-protocol services and dynamically configured for the data-protocol services specific to a service provider (page 4, paragraph 60), responsive to a provisioning signal (38) or to a management session signal (38a) for configuring the terminal (10) (page 4, paragraph 70), for providing an access-request signal (30, 30a) (page 5, paragraph 84); and

a network (16) provided by said service provider (page 7, paragraph 114), responsive to the access-request signal (30, 30a) (page 5, paragraph 84), for providing the data-protocol services specific to a service provider (page 4, paragraph 70), for forwarding the access-request signal (30, 30a) to a help-portal server (24, 24a) using a well-known uniform resource locator (URL) (e.g. APN) and a well-known access point node name (e.g. GGSN that handle the specified APN), for providing the provisioning signal (38) or the management session signal

(38a) to the terminal (10) to perform said configuring (page 5, paragraphs 83-90; page 6, paragraph 106; page 9, paragraph 149) and for enabling after said configuring a connection of said terminal (10) to an IP backbone network via the network (16) (page 6, paragraph 108).

10. Kalke did not specifically teach provisioning in a secure way based on a chain of trust. Martin, JR. taught a similar invention for provisioning in a trusted (i.e. "secure") environment based on a chain of trust (page 2, paragraphs 18-20).

11. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Kalke and Martin, JR. because Martin, JR.'s teaching of provisioning in a trusted environment would increase the security in Kalke's system by providing the ability to control provisioning to mobile devices to prevent unauthorized provisioning (page 1, paragraph 3).

12. As per claim 34, Kalke taught the invention substantially as claimed for a terminal (122, fig. 1), enabled for handling data-protocol services or being dynamically configured by a network (16) for said data-protocol services specific to a service provider (page 4, paragraph 60), comprising:

means for sending an access signal (30, 30a) to the network (16) (page 5, paragraph 84);
means for forwarding said access signal (30, 30a) to a trusted access point node (20, 20a)
optionally identified to the terminal (10) by a trusted home location register (HLR) (18, 18a)
(page 5, paragraph 84; page 9, paragraph 149); means for forwarding said access signal (30, 30a)

Art Unit: 2154

to a trusted domain name service (DNS) server (22, 22a) identified to the terminal (10) by said trusted access point node (20, 20a) (page 5, paragraphs 86 and 90); and means for forwarding said access signal (30, 30a) to a help-portal server (24, 24a) using an address mapping for said help-portal server (24, 24a) identified to the terminal (10) by said trusted domain name service (DNS) server (22, 22a) (page 5, paragraphs 79-80, 86, 90, 95).

13. Kalke did not specifically teach provisioning in a secure way based on a chain of trust. Martin, JR. taught a similar invention for provisioning in a trusted (i.e. "secure") environment based on a chain of trust (page 2, paragraphs 18-20).

14. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Kalke and Martin, JR. because Martin, JR.'s teaching of provisioning in a trusted environment would increase the security in Kalke's system by providing the ability to control provisioning to mobile devices to prevent unauthorized provisioning (page 1, paragraph 3).

15. As per claims 2 and 21, Kalke and Martin, JR. taught the invention substantially as claimed in claims 1 and 19 above. Kalke further taught wherein said data-protocol services specific to said service provider are provided by a general packet radio service (page 9, paragraph 149).

Art Unit: 2154

16. As per claim 3, Kalke and Martin, JR. taught the invention substantially as claimed in claim 1 above. Kalke further taught wherein the access-request signal (30, 30a) is sent by a browser user agent block (12) of the terminal (10) (page 4, paragraphs 61-62).

17. As per claims 4 and 20, Kalke and Martin, JR. taught the invention substantially as claimed in claims 1 and 19 above. Kalke further taught wherein the well-known uniform resource locator (URL) is allowed by an access control profile of the terminal (10) (page 6, paragraph 106).

18. As per claim 5, Kalke and Martin, JR. taught the invention substantially as claimed in claim 1 above. Kalke further taught comprising sending (58, 58a) the provisioning signal (38) or the management session signal (38a) to the terminal (10) for configuring the terminal (10) (page 4, paragraph 70).

19. As per claims 6 and 30, Kalke and Martin, JR. taught the invention substantially as claimed in claims 5 and 19 above. Kalke further taught wherein the provisioning signal (38) is sent over an IP bearer or sent using a short message service (SMS) protocol (fig. 12) (i.e. WAP gateway 1244 connected to the portal 252 as IP bearer).

20. As per claims 7 and 31, Kalke and Martin, JR. taught the invention substantially as claimed in claims 6 and 30 above. Kalke further taught wherein said provisioning signal (38) is

sent over the IP bearer using a hypertext transfer protocol (HTTP) or a hypertext transfer protocol secure (HTTPS) (page 4, paragraph 62).

21. As per claims 8 and 32, Kalke and Martin, JR. taught the invention substantially as claimed in claims 5 and 30 above. Kalke further taught wherein said provisioning signal (38) is sent over the air (OTA) (page 6, paragraph 110).

22. As per claims 9 and 23, Kalke and Martin, JR. taught the invention substantially as claimed in claims 1 and 19 above. Kalke further taught comprising the steps of:

identifying (46, 46a) to the terminal (10) the trusted access point node name by a trusted home location register (HLR) (18, 18a) of the network (16) (page 6, paragraph 106);

forwarding (47, 47a) the access-request signal (30, 30a) to the trusted access point node (20, 20a) by the terminal (10) (page 5, paragraph 84; page 9, paragraph 149);

identifying (48, 48a) to the terminal (10) a trusted domain name service server (22) of the network (16) by the trusted access point node (20, 20a) (page 5, paragraph 84; page 9, paragraph 149);

forwarding (50, 50a) said access-request signal (30, 30a) by the terminal (10) to the trusted domain name service (DNS) server (22, 22a) for identifying an address mapping for the help-portal server (24, 24a) (page 5, paragraphs 86 and 90); and

identifying (51, 51 a) said address mapping to the terminal (10) by the trusted domain name service server (22, 22a) (page 5, paragraph 89).

Art Unit: 2154

23. As per claims 10 and 24, Kalke and Martin, JR. taught the invention substantially as claimed in claims 9 and 23 above. Kalke further taught wherein a security of configuring the terminal (10) is ensured by means of the chain of trust built by the trusted home location register (18, 18a) (1132, fig. 11), by the well-known access point node name for accessing the trusted access point node (20) (page 5, paragraph 87), by the trusted access point node (20, 20a) (page 5, paragraph 86) (i.e. GGSN that handles the specific APN), by the trusted domain name service server (22, 22a) (1024, fig. 10) and by the well-known uniform resource locator (page 5, paragraphs 85-86) (Note that it is inherent that DNS query must included a URL in order for the DNS to retrieve a list of IP addresses).

24. As per claim 11, Kalke and Martin, JR. taught the invention substantially as claimed in claim 1 above. Kalke further taught wherein after the step of forwarding (52, 52a) the access-request signal (30, 30a) to the help-portal server (24, 24a), the method further comprises the steps of: sending (52, 52a) a user authentication request signal (32a, 32b) to an authentication block (26) of the network (16) or to the terminal (10) or to both, the authentication block (26) and the terminal (10), respectively, by the help-portal server (24, 24a), and a receiving authentication confirmation signal (34a or 34b) back from the authentication block (26) or from the terminal (10), respectively, or from both, the authentication block (26) and the terminal (10) (page 14, paragraphs 226 and 228); and

determining if the terminal (10) is authentic by the help-portal server (24, 24a) based on the authentication confirmation signals (34a or 34b) (page 14, paragraph 227).

Art Unit: 2154

25. As per claims 12 and 25, Kalke and Martin, JR. taught the invention substantially as claimed in claims 11 and 23 above. Kalke further taught wherein said access-request signal (30) contains user identification information (e.g. MSISDN), a generic uniform resource locator (URL) request for the help-portal server (24) (page 5, paragraphs 85-86) (Note that it is inherent that DNS query must included a URL in order for the DNS to retrieve a list of IP addresses), and a well-known access point node (APN) name for accessing the trusted access point node (20) or a wildcard access point node (APN) (page 5, paragraph 87).

26. As per claims 13 and 26, Kalke and Martin, JR. taught the invention substantially as claimed in claims 12 and 25 above. Kalke further taught comprises the steps of:

sending (56) a triggering signal (36) (e.g. request) to a provisioning server (28) by the help-portal server (24) (page 4, paragraph 66; fig. 8); and (Since the wireless device access the provisioning server 852 via portal server, thus the request must be forward to the provisioning server by the portal server)

sending (58) a provisioning signal (38) by the provisioning server (28) to the terminal (10) and so configuring said terminal (10) (page 4, paragraph 70).

27. As per claims 14 and 27, Kalke and Martin, JR. taught the invention substantially as claimed in claims 11 and 23 above. Kalke further taught wherein said access-request signal (30a) contains user identification information (e.g. MSISDN), a generic uniform resource locator (URL) request for the help-portal server (24a) (page 5, paragraphs 85-86) (Note that it is inherent that DNS query must included a URL in order for the DNS to retrieve a list of IP addresses) and

Art Unit: 2154

for a device management server (28a) (e.g. PDP address), a well-known access point node name for accessing the trusted access point node (20a) or a wildcard access point node (APN) (e.g. APN) (page 5, paragraph 87).

28. As per claim 28, Kalke and Martin, JR. taught the invention substantially as claimed in claim 27 above. Kalke further taught wherein the network (16) further comprises: a device management server (28a) (242, fig. 2), responsive to the access-request signal (30a) (PDP Context Request) and to a further access-request signal (37) (subsequent PDP Context Request) containing a network access authentication (i.e. responsive to PDP Context Request containing MSISDN), for providing the management session signal (38a) to the terminal (10) for configuring the terminal (10) (page 4, paragraphs 69-70).

29. As per claims 15 and 29, Kalke and Martin, JR. taught the invention substantially as claimed in claims 14 and 28 above. Although, Kalke and Martin, JR. taught comprising the steps of:

 sending an initial provisioning triggering signal (27) to a device management server (28a) for initial provisioning (see Kalke, page 4, paragraphs 65-66); and

 sending a further triggering signal (33) by the help-portal server (24a) to an initialization content handler (15) of the terminal (10), said further triggering signal (33) containing a proxy address for connecting to the device management server (see Martin, JR., page 3-4, paragraphs 29-30), however, Kalke and Martin, JR. did not teach containing a password in the triggering signal. It would have been obvious to one having ordinary skill in the art at the time of the

Art Unit: 2154

invention was made to include a password in a triggering signal (e.g. request) in order for a terminal to access to a server because by doing so it would avoid unauthorized terminal accessing to a sensitive data in the server, thus increase the security of a system.

30. As per claim 16, Kalke and Martin, JR. taught the invention substantially as claimed in claim 15 above. Martin, JR. further taught comprising the step of: determining (64) if the further triggering signal (33) contains an instruction of making a connection (i.e. for establishing a provisioning session) to the device management server (28a) by the terminal (10) (page 3, paragraph 29).

31. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Kalke and Martin, JR. because Martin, JR.'s teaching of determining if a triggering signal contains an instruction of making a connection to the device management server would increase the efficiency of Kalke's system by allowing a terminal to receive provisioning directive remotely from a device management server.

32. As per claim 17, Kalke and Martin, JR. taught the invention substantially as claimed in claim 16 above. Martin, JR. further taught comprises the steps of:

sending (68) a start signal (35) (i.e. forwarding the SMS provisioning message as a start signal) to a device management agent block (17) of the terminal (10) by the initialization content handler block (15) (page 4, paragraph 30);

sending (70) a further access-request signal (37) containing a network access authentication to the device development server (28a) by the device management agent block (17) (page 4, paragraphs 30-31); and

sending (58a) the management session signal (38a) by the device development server (28a) to the terminal (10) for further configuring the terminal (10) (page 4, paragraph 31).

33. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Kalke and Martin, JR. because Martin, JR.'s teaching of sending signal for further configuring the terminal would increase the efficiency of Kalke's system by allowing a terminal to receive provisioning directive remotely from a device management server.

34. As per claims 18 and 22, Kalke and Martin, JR. taught the invention substantially as claimed in claims 1 and 19 above. Kalke further taught comprises the step of: starting a browser user agent (12) by a starting signal (31) from a user (14) (page 8, paragraph 139). (Note that Kalke taught activate a device with user interface (i.e. browser user agent), thus it is inherent that a user must present a starting signal to start the user interface (e.g. clicking on an interface icon).

CONCLUSION

Art Unit: 2154

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soderbacka et al, U.S. Patent Application Publication 2003/0114158, disclosed a system wherein a mobile terminal sending a request (including APN) and accessing APN from a Home Location Register (HLR).

Sevanto et al, U.S. Patent 6,658,011, disclosed a system for exchanging data between a wireless device and a server using PDP Context signal.

Stubbs, U.S. Patent 6,930,994, disclosed a system for exchanging data between a mobile station and a server in a GPRS network.

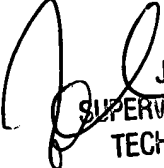
Bilange, U.S. Patent Application Publication 2004/0093595, disclosed a system wherein a mobile device downloads provisioning application from a provisioning server.

36. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2154

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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